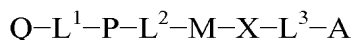


## WHAT IS CLAIMED:

1. A compound having the formula (I):



**I**

or a pharmaceutically acceptable salt, solvate or prodrug thereof, wherein

Q is hydrogen, aryl, heteroaryl, (C<sub>1</sub>-C<sub>6</sub>)alkyl or (C<sub>2</sub>-C<sub>6</sub>)heteroalkyl;

L<sup>1</sup> is a bond, (C<sub>1</sub>-C<sub>4</sub>)alkylene, (C<sub>2</sub>-C<sub>4</sub>)heteroalkylene, O, S(O)<sub>m</sub>, N(R<sup>1</sup>), C(O)-(C<sub>5</sub>-C<sub>7</sub>)heterocycloalkylene, (C<sub>1</sub>-C<sub>4</sub>)alkylene-SO<sub>2</sub>N(R<sup>2</sup>), (C<sub>1</sub>-C<sub>4</sub>)alkylene-N(R<sup>2</sup>)SO<sub>2</sub> or C(O)N(R<sup>2</sup>);

P is an aromatic ring, a heteroaromatic ring, (C<sub>3</sub>-C<sub>8</sub>)heterocycloalkylene or (C<sub>3</sub>-C<sub>8</sub>)cycloalkylene;

L<sup>2</sup> is a bond, (C<sub>1</sub>-C<sub>6</sub>)alkylene, (C<sub>2</sub>-C<sub>6</sub>)heteroalkylene, oxymethylene, O, S(O)<sub>m</sub>, N(R<sup>1</sup>), C(O)N(R<sup>2</sup>), SO<sub>2</sub>N(R<sup>2</sup>), (C<sub>1</sub>-C<sub>4</sub>)alkylene-C(O)N(R<sup>2</sup>), (C<sub>1</sub>-C<sub>4</sub>)alkylene-N(R<sup>2</sup>)C(O), (C<sub>2</sub>-C<sub>4</sub>)alkenylene-C(O)N(R<sup>2</sup>), (C<sub>2</sub>-C<sub>4</sub>)alkenylene-N(R<sup>2</sup>)C(O), (C<sub>1</sub>-C<sub>4</sub>)alkylene-SO<sub>2</sub>N(R<sup>2</sup>), (C<sub>1</sub>-C<sub>4</sub>)alkylene-N(R<sup>2</sup>)SO<sub>2</sub>, (C<sub>2</sub>-C<sub>4</sub>)alkenylene-SO<sub>2</sub>N(R<sup>2</sup>) or (C<sub>2</sub>-C<sub>4</sub>)alkenylene-N(R<sup>2</sup>)SO<sub>2</sub>;

M is an aromatic ring, a heteroaromatic ring, (C<sub>5</sub>-C<sub>8</sub>)cycloalkylene, aryl(C<sub>1</sub>-C<sub>4</sub>)alkylene or heteroaryl(C<sub>1</sub>-C<sub>4</sub>)alkylene;

X is CR<sup>3</sup>R<sup>4</sup>, N(R<sup>5</sup>), O or S(O)<sub>n</sub>;

L<sup>3</sup> is a bond, (C<sub>1</sub>-C<sub>5</sub>)alkylene or (C<sub>2</sub>-C<sub>5</sub>)heteroalkylene, provided that L<sup>3</sup> is not a bond when L<sup>2</sup> is a bond;

A is -CO<sub>2</sub>H, tetrazol-5-yl, -SO<sub>3</sub>H, -PO<sub>3</sub>H<sub>2</sub>, -SO<sub>2</sub>NH<sub>2</sub>, -C(O)NHSO<sub>2</sub>CH<sub>3</sub>, -CHO, -C(O)R<sup>6</sup>, -C(O)NHR<sup>6</sup>, -C(O)NHOR<sup>7</sup>, thiazolidinedion-yl, hydroxyphenyl or pyridyl;

R<sup>1</sup> is (C<sub>1</sub>-C<sub>6</sub>)alkyl, aryl(C<sub>1</sub>-C<sub>3</sub>) alkyl or (C<sub>2</sub>-C<sub>6</sub>)heteroalkyl;

R<sup>2</sup> is hydrogen, (C<sub>1</sub>-C<sub>6</sub>)alkyl or (C<sub>2</sub>-C<sub>6</sub>)heteroalkyl;

R<sup>3</sup> is cyano, aryl, heteroaryl, (C<sub>1</sub>-C<sub>8</sub>)alkyl, (C<sub>2</sub>-C<sub>8</sub>)alkyl, (C<sub>2</sub>-C<sub>8</sub>)alkenyl, (C<sub>3</sub>-C<sub>8</sub>)alkenyl, (C<sub>2</sub>-C<sub>8</sub>)alkynyl, (C<sub>3</sub>-C<sub>8</sub>)alkynyl, -NR<sup>8</sup>R<sup>9</sup>, -C(O)NR<sup>10</sup>R<sup>11</sup>, -NR<sup>12</sup>C(O)R<sup>13</sup> or -NR<sup>12</sup>S(O)<sub>p</sub>R<sup>13</sup>;

R<sup>4</sup> is hydrogen, cyano, aryl, heteroaryl, (C<sub>1</sub>-C<sub>8</sub>)alkyl, (C<sub>2</sub>-C<sub>8</sub>)alkenyl or (C<sub>2</sub>-C<sub>8</sub>)alkynyl;

optionally, R<sup>3</sup> and R<sup>4</sup> are combined to form a 3-, 4-, 5-, 6- or 7-membered ring containing from zero to three heteroatoms selected from N, O and S;

R<sup>5</sup> is hydrogen, aryl, heteroaryl, (C<sub>1</sub>-C<sub>8</sub>)alkyl, (C<sub>2</sub>-C<sub>8</sub>)alkenyl, (C<sub>2</sub>-C<sub>8</sub>)alkynyl or (C<sub>3</sub>-C<sub>8</sub>)cycloalkyl;

R<sup>6</sup> is heteroaryl;

R<sup>7</sup> is hydrogen or (C<sub>1</sub>-C<sub>5</sub>)alkyl;

R<sup>8</sup> and R<sup>9</sup> are independently hydrogen, (C<sub>1</sub>-C<sub>5</sub>)alkyl, oxy(C<sub>1</sub>-C<sub>5</sub>)alkyl or carboxy(C<sub>1</sub>-C<sub>5</sub>)alkyl;

optionally, R<sup>8</sup> and R<sup>9</sup> are combined to form a 4-, 5-, 6- or 7-membered ring containing the nitrogen atom to which they are attached and from 0 to 2 additional heteroatoms selected from N, O and S;

R<sup>10</sup>, R<sup>11</sup> and R<sup>12</sup> are independently selected from hydrogen, aryl, heteroaryl, (C<sub>1</sub>-C<sub>8</sub>)alkyl, (C<sub>2</sub>-C<sub>8</sub>)heteroalkyl, (C<sub>3</sub>-C<sub>8</sub>)cycloalkyl and (C<sub>3</sub>-C<sub>8</sub>)heterocycloalkyl;

optionally, R<sup>10</sup> and R<sup>11</sup> are combined to form a 4-, 5-, 6- or 7-membered ring containing the nitrogen atom to which they are attached and from 0 to 2 additional heteroatoms selected from N, O and S;

R<sup>13</sup> is aryl, heteroaryl, (C<sub>1</sub>-C<sub>8</sub>)alkyl, (C<sub>2</sub>-C<sub>8</sub>)heteroalkyl, (C<sub>3</sub>-C<sub>8</sub>)cycloalkyl or (C<sub>3</sub>-C<sub>8</sub>)heterocycloalkyl;

the subscripts m and n are independently 0, 1 or 2; and

the subscript p is 1 or 2; and

wherein the compound is other than 3-(4-(4-methoxybenzyloxy)phenyl)pent-4-ynoic acid;  $\beta$ -ethenyl-4-phenylmethoxy-benzenepropanoic acid; 4-(2-quinolinylmethoxy)- $\beta$ -[4-(2-quinolinylmethoxy)phenyl]-benzenepropanoic acid; N-[4-(benzoylamino)phenyl]-N-phenyl-glycine; 3-(4-(isopentyloxy)benzamido)-3-phenylpropanoate; 3-(4-isobutoxybenzamido)-3-phenylpropanoate; (*R*)-2-((*1R,4R*)-4-isopropylcyclohexanecarboxamido)-3-phenylpropanoic acid; (*R*)-3-(4-(benzyloxy)phenyl)-2-(tert-butoxycarbonyl)propanoic acid; 3-(4-chlorophenyl)-3-(furan-2-carboxamido)propanoic acid; 3-(3,4-dimethoxyphenyl)-3-(furan-2-carboxamido)propanoic acid; 3-(4-chlorobenzamido)-3-(4-(dimethylamino)phenyl)propanoic acid; 3-(2-(2-(3,4-dimethylphenoxy)ethylthio)-1*H*-benzo[d]imidazol-1-yl)propanoic acid; {2-Bromo-4-[(3,4-dichloro-phenyl)-hydrazonomethyl]-6-ethoxy-phenoxy}-acetic acid; 2-(4-(2-(2-(4-chlorophenyl)furan-5-carboxamido)ethyl)phenoxy)-2-methylpropanoic acid; 5-(3-(3,4-dimethoxyphenyl)-5-(2-fluorophenyl)-4,5-dihydropyrazol-1-yl)-5-oxopentanoic acid; 2-(2-(3-(3,4-dihydro-2*H*-benzo[b][1,4]dioxepin-7-yl)-2-methyl-4-oxo-4*H*-chromen-7-yloxy)acetamido)acetic acid; 3-(4'-Bromo-biphenyl-4-yl)-4-phenyl-butyric acid; 3-(4'-Bromo-biphenyl-4-yl)-3-phenylsulfanyl-propionic acid; 3-(5-(2-chloro-6-fluoro-4-(trifluoromethyl)phenoxy)-2,4-dinitrophenyl)propanoic acid; 3-(3-(2-chloro-4-(trifluoromethyl)phenoxy)phenyl)propanoic acid; 3-(4-(4-methoxybenzyloxy)phenyl)pent-4-ynoic acid; 3-(4-(4-methoxybenzyloxy)phenyl)-5-(trimethylsilyl)pent-4-ynoic acid;  $\beta,\beta$ -dimethyl-4-[[[4-methyl-2-[4-(trifluoromethyl)phenyl]-5-thiazolyl]methyl]thio]-

benzenepropanoic acid;  $\beta$ -amino-4-[(4-bromo-2,5-dihydro-2-methyl-5-oxo-1-phenyl-1H-pyrazol-3-yl)methoxy]-3-methoxy-benzenepropanoic acid; or salt thereof.

2. The compound of Claim 1, wherein when P and M are benzene, at least two of  $L^2$ , X and  $L^3$  are other than  $CH_2$
3. The compound of Claim 1, wherein when Q is aryl or heteroaryl,  $L^1$  is a bond, M is a monocyclic aromatic ring, X is  $N(R^5)$ , O or  $S(O)_n$ , and A contains a carbonyl group, then P is not a 1,2-azole ring.
4. The compound of Claim 1, wherein when Q is aryl,  $L^1$  is a bond, M is an aromatic ring, X is  $CR^3R^4$ , O or  $S(O)_n$  and A contains a carbonyl group, then P is other than furan or thiophene.
5. The compound of Claim 1, wherein P is selected from the group consisting of benzene, naphthalene, pyrrole, pyrazole, imidazole, pyrazine, oxazole, isoxazole, thiazole, furan, thiophene, pyridine, pyrimidine, pyridazine, benzothiazole, purine, benzimidazole, benzoxazole, triazole, oxadiazole, thiadiazole, benzooxadiazole, dibenzofuran, indole, indazole, carbazole, carboline, isoquinoline, quinoxaline and quinoline.
6. The compound of Claim 1, wherein P is selected from the group consisting of benzene, naphthalene, pyrrole, pyrazine, pyridine, pyrimidine, pyridazine, purine, indole, carboline, isoquinoline, quinoxaline and quinoline.
7. The compound of Claim 1.
8. The compound of Claim 1, wherein A is  $-CO_2H$ , tetrazol-5-yl,  $-C(O)NHSO_2CH_3$  or  $-C(O)NHR^6$ .
9. The compound of Claim 1, wherein  $R^3$  is cyano, aryl, heteroaryl,  $(C_1-C_8)$ alkyl,  $(C_2-C_8)$ alkenyl,  $(C_2-C_8)$ alkynyl or  $-NR^8R^9$ .
10. The compound of Claim 9, wherein  $R^4$  is hydrogen.
11. The compound of Claim 1, wherein M is an aromatic ring, a heteroaromatic ring or  $(C_5-C_8)$ cycloalkylene.

12. The compound of Claim 11, wherein  $R^3$  is cyano, aryl, heteroaryl,  $(C_1-C_8)$ alkyl,  $(C_2-C_8)$ alkenyl,  $(C_2-C_8)$ alkynyl or  $-NR^8R^9$ .
13. The compound of Claim 12, wherein A is  $-CO_2H$  or tetrazol-5-yl.
14. The compound of Claim 12, wherein A is  $-CO_2H$ .
15. The compound of Claim 14, wherein X is  $CR^3R^4$  or  $N(R^5)$ .
16. The compound of Claim 15, wherein  $L^3$  is  $(C_1-C_5)$ alkylene or  $(C_2-C_5)$ heteroalkylene.
17. The compound of Claim 16, wherein P is an aromatic ring or a heteroaromatic ring.
18. The compound of Claim 1, wherein P is an aromatic ring or a heteroaromatic ring.
19. The compound of Claim 18, wherein X is  $CR^3R^4$  or  $N(R^5)$ .
20. The compound of Claim 19, wherein  $L^3$  is  $(C_1-C_5)$ alkylene.
21. The compound of Claim 20, wherein A is  $-CO_2H$ .
22. The compound of Claim 21, wherein  $R^3$  is cyano, aryl, heteroaryl,  $(C_1-C_8)$ alkyl,  $(C_2-C_8)$ alkenyl,  $(C_2-C_8)$ alkynyl or  $-NR^8R^9$ .
23. The compound of Claim 22, wherein M is benzene or a heteroaromatic ring.
24. The compound of Claim 23, wherein  $R^4$  is hydrogen.
25. The compound of Claim 23, wherein  $L^1$  is a bond, O or  $N(R^1)$  and  $L^2$  is  $(C_2-C_6)$ heteroalkylene.
26. The compound of Claim 24, wherein  $L^1$  is a bond and  $L^2$  is  $(C_2-C_6)$ heteroalkylene.
27. The compound of Claim 19, wherein M is benzene and X is *para* to  $L^2$ .
28. The compound of Claim 27, wherein  $L^3$  is methylene.

29. The compound of Claim 28, wherein A is  $-\text{CO}_2\text{H}$ .
30. The compound of Claim 29, wherein  $\text{R}^3$  is cyano, aryl, heteroaryl,  $(\text{C}_1\text{-C}_8)\text{alkyl}$ ,  $(\text{C}_2\text{-C}_8)\text{alkenyl}$ ,  $(\text{C}_2\text{-C}_8)\text{alkynyl}$  or  $-\text{NR}^8\text{R}^9$ .
31. The compound of Claim 30, wherein  $\text{L}^1$  is a bond and  $\text{L}^2$  is oxymethylene or thiomethylene.
32. The compound of Claim 31, wherein  $\text{R}^4$  is hydrogen.
33. The compound of Claim 1, wherein Q is aryl.
34. The compound of Claim 1, wherein  $\text{L}^1$  is a bond and  $\text{L}^2$  is oxymethylene or thiomethylene.
35. The compound of Claim 1, wherein P is an aromatic ring or a heteroaromatic ring and A is  $-\text{CO}_2\text{H}$ .
36. The compound of Claim 1, wherein P is an aromatic ring or a heteroaromatic ring and X is  $\text{CR}^3\text{R}^4$  or  $\text{N}(\text{R}^5)$ .
37. The compound of Claim 1, wherein A is  $-\text{CO}_2\text{H}$  and X is  $\text{CR}^3\text{R}^4$  or  $\text{N}(\text{R}^5)$ .
38. The compound of Claim 36, wherein X is  $\text{CR}^3\text{R}^4$  and  $\text{R}^3$  is cyano, aryl, heteroaryl,  $(\text{C}_1\text{-C}_8)\text{alkyl}$ ,  $(\text{C}_2\text{-C}_8)\text{alkenyl}$ ,  $(\text{C}_2\text{-C}_8)\text{alkynyl}$  or  $-\text{NR}^8\text{R}^9$ .
39. The compound of Claim 37, wherein X is  $\text{CR}^3\text{R}^4$  and  $\text{R}^3$  is cyano, aryl, heteroaryl,  $(\text{C}_1\text{-C}_8)\text{alkyl}$ ,  $(\text{C}_2\text{-C}_8)\text{alkenyl}$ ,  $(\text{C}_2\text{-C}_8)\text{alkynyl}$  or  $-\text{NR}^8\text{R}^9$ .
40. A pharmaceutical composition comprising a pharmaceutically acceptable carrier, diluent or excipient and the compound of Claim 1.
41. A method for treating a disease or condition selected from the group consisting of type II diabetes, obesity, hyperglycemia, glucose intolerance, insulin resistance, hyperinsulinemia, hypercholesterolemia, hypertension, hyperlipoproteinemia, hyperlipidemia, hypertriglyceridemia, dyslipidemia, metabolic syndrome, syndrome X,

cardiovascular disease, atherosclerosis, kidney disease, ketoacidosis, thrombotic disorders, nephropathy, diabetic neuropathy, diabetic retinopathy, sexual dysfunction, dermatopathy, dyspepsia, hypoglycemia, cancer and edema comprising administering to a subject in need thereof a therapeutically effective amount of the compound of Claim 1.

42. The method of claim 41 wherein said disease or condition is type II diabetes.

43. A method for treating a disease or condition responsive to the modulation of GPR40 comprising administering to a subject in need thereof a therapeutically effective amount of the compound of Claim 1.

44. The method of Claim 43 wherein said disease or condition is selected from the group consisting of type II diabetes, obesity, hyperglycemia, glucose intolerance, insulin resistance, hyperinsulinemia, hypercholesterolemia, hypertension, hyperlipoproteinemia, hyperlipidemia, hypertriglyceridemia, dyslipidemia, metabolic syndrome, syndrome X, cardiovascular disease, atherosclerosis, kidney disease, ketoacidosis, thrombotic disorders, nephropathy, diabetic neuropathy, diabetic retinopathy, sexual dysfunction, dermatopathy, dyspepsia, hypoglycemia, cancer and edema.

45. The method as in any one of Claims 41-44 wherein said compound is administered orally, parentally or topically.

46. The method of Claim 41 wherein said compound is administered in combination with a second therapeutic agent.

47. The method of Claim 46 wherein said second therapeutic agent is a metformin or a thiazolidinedione.

48. A method for modulating GPR40 function in a cell, comprising contacting a cell with the compound of Claim 1.

49. A method for modulating GPR40 function comprising contacting GPR40 with the compound of Claim 1.

50. A method for modulating circulating insulin concentration in a subject, comprising administering the compound of Claim 1 to the subject.

51. The method of Claim 50 where insulin concentration is increased.
52. The method of Claim 50 where insulin concentration is decreased.